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10/786,863	02/24/2004	Johan van de Groenendaal	063170.6774 (20000213-CON	3676

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EXAMINER	
PHAM, MICHAEL	
ART UNIT	PAPER NUMBER
2167	

NOTIFICATION DATE	DELIVERY MODE
01/21/2011	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/786,863	GROENENDAAL ET AL.	
	Examiner	Art Unit	
	MICHAEL PHAM	2167	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 November 2010*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-11 and 15-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11 and 15-23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/1/2010 has been entered.

Claim Status

2. Claims 1-11 and 15-23 are pending

3. Claims 1-11 and 15-23 have been examined.

Claim Objections

4. Prior objection to claim 23 is withdrawn.

35 USC § 101

5. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Regarding claim 1, this claim recites a "machine-readable non-transitory medium". In the absence of any other modifying disclosure of this limitation in the specification, the '

machine-readable non-transitory medium' is limited to statutory embodiments only such that it satisfies the terms of 35 U.S.C. 101.

7. Regarding claim 9, this claim recites a "machine-readable non-transitory medium". In the absence of any other modifying disclosure of this limitation in the specification, the ' machine-readable non-transitory medium' is limited to statutory embodiments only such that it satisfies the terms of 35 U.S.C. 101.

8. Regarding claim 10, this claim recites a "machine-readable non-transitory medium". In the absence of any other modifying disclosure of this limitation in the specification, the ' machine-readable non-transitory medium' is limited to statutory embodiments only such that it satisfies the terms of 35 U.S.C. 101.

9. Regarding claim 21, this claim recites a "non-transitory program storage device". In the absence of any other modifying disclosure of this limitation in the specification, the "non-transitory program storage device" is limited to statutory embodiments only such that it satisfies the terms of 35 U.S.C. 101.

10. Regarding claim 22, this claim recites a "non-transitory program storage device". In the absence of any other modifying disclosure of this limitation in the specification, the "non-

transitory program storage device" is limited to statutory embodiments only such that it satisfies the terms of 35 U.S.C. 101.

11. Regarding claim 23, this claim recites a "machine-readable non-transitory medium". In the absence of any other modifying disclosure of this limitation in the specification, the ' machine-readable non-transitory medium' is limited to statutory embodiments only such that it satisfies the terms of 35 U.S.C. 101.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

13. Claims 1-11 and 15-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication 2002/0143755 by Wynblatt et. al. (hereafter Wynblatt) further in view of U.S. Patent Application 6219708 by Dale Warner Martenson (hereafter Martenson).

Claim 1 :

Wynblatt discloses the following claimed limitations:

"a relational interface embodied in a machine-readable non-transitory medium and when executed by an electronic processor configured to receive a relational query from a software application requesting network management information from a specified network device, the network management information including interface information allowing the software application to monitor, control, and configure devices on a network remotely via the network;"[See figure 1 elements 20, 25, 30, and 0052, system to convert traditional database queries into network messages that are appropriate for a network of data sources in which each data source is viewed as one or more database records (realtonal model) or object instances (object oriented model) or some combination thereof, and in which the schema described above is used. See 0042, examples of data consumers 25 include controllers and monitoring systems. Accordingly, a relational interface (figure 1 element 30/20) embodied in a machine-readable medium (figure 1) and operable to receive a relational query (0052, traditional database query) from a software application (figure 1 element 25/30) requesting network management information (data) from a specified network device (figure 1 element 30/20), the network management information including interface information (data) allowing the software application (figure 1 element 25/30) to monitor (0042, monitoring system), control (0042, control system), and configure devices on a network remotely via the network (0054, list of return values which the data sources should return if the constraints are satisfied)]

"a relational mapper embodied in a machine-readable non-transitory medium and configured to translate the relational query requesting network management information received through the relational interface from the software application, to native protocol messages according to an access protocol associated with the network device; and"[0052, system to

convert traditional database queries into network messages that are appropriate for a network of data sources in which each data source is viewed as one or more database records (relational model) or object instances (object oriented model) or some combination thereof, and in which the schema described above is used. Accordingly, a relational mapper (0051, A. Querying node translating query into network messages) embodied in a machine-readable non-transitory medium (figure 1) and operable to translate (0052, convert) the relational query requesting network management information (0052, traditional database query) received through the relational interface (0052, traditional database query) from the software application (figure 1 element 25/30), to native protocol messages (0052, network messages) according to an access protocol (0052, schema) associated with the network device (figure 1 element 30/20)]

"a protocol transaction handler embodied in a machine-readable non-transitory medium and configured to

handle the native protocol messages as a transaction with the network device,

return a result of the transaction to the software application."[See 0072 Network interface response to network messages. See 0073, each data producing node 20 or 30 includes either in its network interface or in the application program resident on that node the necessary software firmware that processes received network messages and transmits response messages back to the appropriate querying node when the query constraints are met. Accordingly, a protocol transaction handler (0072, Network interface response to network messages) embodied in a machine-readable non-transitory medium (figure 1) and configured to

handle the native protocol messages (0073, network messages) as a transaction (received/transmits) with the network device (figure 1 element 30/20)

return a result of the transaction to the software application (transmits response message back to the appropriate querying node when the query constraints are met)]

Wynblatt does not explicitly disclose

"a plurality of handlers embodied in a machine-readable non-transitory medium, the plurality of handlers comprising an HTTP handler, an SNMP handler, and a Telnet handler; and"

"select a handler from the plurali .ty of handlers according to the access protocol associated with the network device, wherein the selected handler is configured to:"

"extract the interface information from the result of the transaction by applying a filter, the filter selected based on the network device and a vendor associated with the network device, the filter compatible with a proprietary data organization associated with the vendor."

On the other hand, Martenson discloses

"a plurality of handlers embodied in a machine-readable non-transitory medium, the plurality of handlers comprising an HTTP handler, an SNMP handler, and a Telnet handler; and" [See col. 3 lines 30-33, Network protocols include, but not limited to: Transmission Control Protocol/Internet (TCP/IP), Hypertext Transfer Protocol (HTTP), File Transfer Protocol (FTP), proprietary resource management protocols, Telnet, and Simple Network Management Protocol (SNMP). Accordingly, a plurality of handlers (network protocols) embodied in a machine-readable non-transitory medium (figure 2), the plurality of handlers (network protocols) comprising an HTTP handler (HTTP), an SNMP handler (SNMP), and a Telnet handler (Telnet)]

"select a handler from the plurality of handlers according to the access protocol associated with the network device, wherein the selected handler is configured to:"[Abstract, the system providing for remote client control of a resource using common network protocol languages, thereby enabling a user to manage the resource using an existing browser. col. 3 lines 30-33, Network protocols include, but not limited to: Transmission Control Protocol/Internet (TCP/IP), Hypertext Transfer Protocol (HTTP), File Transfer Protocol (FTP), proprietary resource management protocols, Telnet, and Simple Network Management Protocol (SNMP). col. 3 lines 58-61, The more popular the protocol, the more likely users will have a compatible browser for selecting management options and monitoring resource fault/status conditions. Accordingly, select a handler from the plurality of handlers (using common network protocol languages) according to the access protocol (browser) associated with the network device (client).]

"extract the interface information from the result of the transaction by applying a filter, the filter selected based on the network device and a vendor associated with the network device, the filter compatible with a proprietary data organization associated with the vendor."[See col. 4 lines 10-31. Accordingly, extract the interface information (client selects an option and the client's browser automatically transmits a message based on the option selected) from the result of the transaction (view provided the client) by applying a filter (options database), the filter (options database) selected (downloading on or more options to the client from the options database) based on the network device (client) and a vendor (network resource) associated with the network device (client access the particular network resource), the filter (options database) compatible with a proprietary data organization (options are preprogrammed for that particular

network resource, and each option is associated with an operation to perform at the network resource) associated with the vendor (network resource)]

Both Wynblatt and Martenson are systems of network data management systems that control different data resources. They are therefore within the same field of endeavor. Wynblatt however lacked explicitly disclosing the specific network protocols being claimed. Martenson disclosed the specific network protocols as claimed above. It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to have applied Martenson's disclosure above to the disclosure of Wynblatt for the purpose of allowing clients to use common network protocol languages and provide simplified user interfaces for network resource management.

Claim 2 :

The combination of Wynblatt and Martenson disclose in Wynblatt "wherein the relational mapper includes a relational model of the network device."[0052, relational model]

Claim 3 :

The combination of Wynblatt and Martenson disclose in Wynblatt "wherein the relational mapper is configured to translate a query to plural messages corresponding to plural access protocols."[figure 2 element 102 and 104. Accordingly, wherein the relational mapper is configured to translate a query (102 decomposes query into network messages) to plural messages corresponding (104, route network messages)to plural access protocols (106)]

Claim 4 :

The combination of Wynblatt and Martenson disclose in Wynblatt "wherein the relational mapper is expandable to receive queries directed to additional network devices which use other protocols different from said access protocol, transparent to said software application."[See figure 1, 0049, and 0052. wherein the relational mapper is expandable to receive queries (traditional database queries) directed to additional network devices (figure 1 element 20/30) which use other protocols different (local schema) from said access protocol (global schema), transparent to said software application (figure 1 element 25/30)]

Claim 5 :

The combination of Wynblatt and Martenson disclose in Wynblatt "wherein the collection of information of the network device is viewed as a relational database."[0052. Accordingly, wherein the collection of information of the network device is viewed as a relational database (viewed as one or more database records)]

Claim 6 :

The combination of Wynblatt and Martenson disclose in Wynblatt "wherein the relational query is independent of management and/or access protocols."[0052. Accordingly, wherein the relational query (traditional database queries) is independent of management and/or access protocols (schema)]

Claim 7 :

The combination of Wynblatt and Martenson disclose in Wynblatt "wherein the translation of the relational query to native protocol messages is an abstraction transparent to said software application."[0052. Accordingly, wherein the translation (convert) of the relational query (traditional database queries) to native protocol messages (network messages) is an abstraction transparent to said software application (system to convert).]

Claim 8 :

The combination of Wynblatt and Martenson disclose in Wynblatt "wherein a form of the relational query does not depend on the access protocol to which the relational query is to be translated."[0052, Accordingly, wherein a form of the relational query (parts of query) does not depend (relevant parts of each query for each data source) on the access protocol (schema) to which the relational query (traditional database queries) is to be translated (converted)]

Claim 9 :

Wynblatt discloses the following claimed limitations:

"A relational modeler embodied in a machine-readable non-transitory medium that when executed by an electronic processor is configured to translate a relational query from a software application requesting network management information from a specified network device, to native protocol messages according to an access protocol associated with the network device, wherein said native protocol messages is handled as a transaction with the network device, the

network management information including interface information allowing the software application to monitor, control, and configure devices on a network remotely via the network."[See figure 1 elements 20, 25, 30, and 0052, system to convert traditional database queries into network messages that are appropriate for a network of data sources in which each data source is viewed as one or more database records (relational model) or object instances (object oriented model) or some combination thereof, and in which the schema described above is used. See 0072 Network interface response to network messages. See 0073, each data producing node 20 or 30 includes either in its network interface or in the application program resident on that node the necessary software firmware that processes received network messages and transmits response messages back to the appropriate querying node when the query constraints are met. See 0042, examples of data consumers 25 include controllers and monitoring systems. Accordingly, a relational modeler embodied in a machine-readable medium that when executed by an electronic processor is configured to (figure 1) translate (0052, convert) a relational query (0052 traditional database query) from a software application (figure 1 element 30/25) requesting network management information (data) from a specified network device (figure 1 element 30/20), to native protocol messages (network messages) according to an access protocol (schema) associated with the network device (figure 1 element 30/20), wherein said native protocol messages (network messages) is handled as a transaction (0072, received/transmits responses) with the network device (figure 1 element 30/20), the network management information including interface information (data) allowing the software application (figure 1 element 25/30) to monitor (0042, monitoring system), control (0042, control system), and configure devices on a network remotely via the network (0054, list of return values which the data sources should

return if the constraints are satisfied)]

Wynblatt does not explicitly disclose

"the interface information being extracted from a result of the transaction by application of a filter, the filter selected based on the network device and a vendor associated with the network device, the filter compatible with a proprietary data organization associated with the vendor."

On the other hand, Martenson discloses

"the interface information being extracted from a result of the transaction by application of a filter, the filter selected based on the network device and a vendor associated with the network device, the filter compatible with a proprietary data organization associated with the vendor."[See col. 4 lines 10-33. Accordingly, the interface information being extracted (client selects an option and the client's browser automatically transmits a message based on the option selected) from a result of the transaction (view provided the client) by application of a filter(options database), the filter (options database) selected (downloading on or more options to the client from the options database) based on the network device (client) and a vendor (network resource) associated with the network device (client access the particular network resource), the filter (options database) compatible with a proprietary data organization (options are preprogrammed for that particular network resource, and each option is associated with an operation to perform at the network resource) associated with the vendor (network resource)]

Both Wynblatt and Martenson are systems of network data management systems that control different data resources. They are therefore within the same field of endeavor. Wynblatt however lacked explicitly disclosing the specific network protocols being claimed. Martenson disclosed the specific network protocols as claimed above. It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to have applied Martenson's disclosure above to the disclosure of Wynblatt for the purpose of allowing clients to use common network protocol languages and provide simplified user interfaces for network resource management.

Claim 10 :

Wynblatt discloses the following claimed limitations:

"a first segment including relational interface code to receive a relational query from a software application requesting network management information from a specified network device, the network management information including information allowing the software application to monitor, control, and configure devices on a network remotely via the network;"[See figure 1 elements 20, 25, 30, and 0052, system to convert traditional database queries into network messages that are appropriate for a network of data sources in which each data source is viewed as one or more database records (realtonal model) or object instances (object oriented model) or some combination thereof, and in which the schema described above is used. See 0042, examples of data consumers 25 include controllers and monitoring systems. Accordingly, a first segment including relational interface code to receive a relational query (traditional

database query) from a software application (figure 1 element 25/30) requesting network management interface information (data) from a specified network device (figure 1 element 30/20), the network management information including information (data) allowing the software application (figure 1 element 25/30) to monitor (0042, monitoring system), control (0042, control system), and configure devices on a network remotely via the network (0054, list of return values which the data sources should return if the constraints are satisfied)]]

"a second segment including relational mapper code to translate the relational query requesting network management information received from the software application, to native protocol messages according to an access protocol associated with the network device; and"[0052, system to convert traditional database queries into network messages that are appropriate for a network of data sources in which each data source is viewed as one or more database records (relational model) or object instances (object oriented model) or some combination thereof, and in which the schema described above is used. Accordingly, a second segment including relational mapper code to translate (convert) the relational query requesting network management information (traditional database query) received from the software application (figure 1 element 25/30), to native protocol messages (network messages) according to an access protocol (schema) associated with the network device (figure 1 element 20/30).]

"a third segment including protocol transaction handler code to handle the native protocol messages as a transaction with the network device, and return a result of the transaction to the software application."[See 0072 Network interface response to network messages. See 0073, each data producing node 20 or 30 includes either in its network interface or in the application program resident on that node the necessary software firmware that processes received network

messages and transmits response messages back to the appropriate querying node when the query constraints are met. Accordingly, a third segment including protocol transaction handler code to handle the native protocol messages (network messages) as a transaction (received/transmits) with the network device (figure 1 element 20/30), and return a result of the transaction (transmits response messages back) to the software application (figure 1 element 25/30)]

Wynblatt does not explicitly disclose

"comprising an HTTP handler, an SNMP handler, and a Telnet handler;"

"select a handler from the plurali .ty of handlers according to the access protocol associated with the network device, wherein the selected handler is configured to:"

"extract the interface information from the result of the transaction by applying a filter, the filter selected based on the network device and a vendor associated with the network device, the filter compatible with a proprietary data organization associated with the vendor."

On the other hand, Martenson discloses

"comprising an HTTP handler, an SNMP handler, and a Telnet handler; and" [See col. 3 lines 30-33, Network protocols include, but not limited to: Transmission Control Protocol/Internet (TCP/IP), Hypertext Transfer Protocol (HTTP), File Transfer Protocol (FTP), proprietary resource management protocols, Telnet, and Simple Network Management Protocol (SNMP). Accordingly, comprising an HTTP handler (HTTP), an SNMP handler (SNMP), and a Telnet handler (Telnet)]

"select a handler from the plurality of handlers according to the access protocol associated with the network device, wherein the selected handler is configured to:"[Abstract, the system providing for remote client control of a resource using common network protocol languages, thereby enabling a user to manage the resource using an existing browser. col. 3 lines 30-33, Network protocols include, but not limited to: Transmission Control Protocol/Internet (TCP/IP), Hypertext Transfer Protocol (HTTP), File Transfer Protocol (FTP), proprietary resource management protocols, Telnet, and Simple Network Management Protocol (SNMP). col. 3 lines 58-61, The more popular the protocol, the more likely users will have a compatible browser for selecting management options and monitoring resource fault/status conditions. Accordingly, select a handler from the plurality of handlers (using common network protocol languages) according to the access protocol (browser) associated with the network device (client).]

"extract the interface information from the result of the transaction by applying a filter, the filter selected based on the network device and a vendor associated with the network device, the filter compatible with a proprietary data organization associated with the vendor."[See col. 4 lines 10-31. Accordingly, extract the interface information (client selects an option and the client's browser automatically transmits a message based on the option selected) from the result of the transaction (view provided the client) by applying a filter (options database), the filter (options database) selected (downloading on or more options to the client from the options database) based on the network device (client) and a vendor (network resource) associated with the network device (client access the particular network resource), the filter (options database) compatible with a proprietary data organization (options are preprogrammed for that particular

network resource, and each option is associated with an operation to perform at the network resource) associated with the vendor (network resource)]

Both Wynblatt and Martenson are systems of network data management systems that control different data resources. They are therefore within the same field of endeavor. Wynblatt however lacked explicitly disclosing the specific network protocols being claimed. Martenson disclosed the specific network protocols as claimed above. It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to have applied Martenson's disclosure above to the disclosure of Wynblatt for the purpose of allowing clients to use common network protocol languages and provide simplified user interfaces for network resource management.

Claim 11 :

Wynblatt discloses the following claimed limitations:

"receiving a relational query from a software application requesting network management information from a specified network device;"[See figure 1 elements 20, 25, 30, and 0052, system to convert traditional database queries into network messages that are appropriate for a network of data sources in which each data source is viewed as one or more database records (realtonal model) or object instances (object oriented model) or some combination thereof, and in which the schema described above is used. Accordingly, receiving a relational query (traditiaonal database queries) from a software application (figure 1 element 25/30) requesting

network management information (records) from a specified network device (figure 1 element 20/30)]

"the network management information including interface information allowing the software application to monitor, control, and configure devices on a network remotely via the network;"[See figure 1 elements 20, 25, 30, and 0052, system to convert traditional database queries into network messages that are appropriate for a network of data sources in which each data source is viewed as one or more database records (realtonal model) or object instances (object oriented model) or some combination thereof, and in which the schema described above is used. See 0042, examples of data consumers 25 include controllers and monitoring systems. Accordingly, the network management information including interface information (data) allowing the software application (figure 1 element 25/30) to monitor (0042, monitoring system), control (0042, control system), and configure devices on a network remotely via the network (0054, list of return values which the data sources should return if the constraints are satisfied)]

"translating the relational query received from the software application, to native protocol messages according to an access protocol associated with the network device; and"[0052, system to convert traditional database queries into network messages that are appropriate for a network of data sources in which each data source is viewed as one or more database records (relational model) or object instances (object oriented model) or some combination thereof, and in which the schema described above is used. Accordingly, translating (converting) the relational query (traditional database query) received from the software application (figure 1

element 25/30), to native protocol messages (network messages) according to an access protocol (schema) associated with the network device (figure 1 element 20/30).]

"handles the native protocol messages as a transaction with the network device, returns a result of the transaction to the software application."[See 0072 Network interface response to network messages. See 0073, each data producing node 20 or 30 includes either in its network interface or in the application program resident on that node the necessary software firmware that processes received network messages and transmits response messages back to the appropriate querying node when the query constraints are met. Accordingly, handles the native protocol messages (network messages) as a transaction (received/transmit) with the network device (figure 1 element 30/20), returns a result of the transaction (transmits response back) to the software application (figure 1 element 25/30)]

Wynblatt does not explicitly disclose

"storing a plurality of handlers embodied in a machine-readable non-transitory medium, the plurality of handlers comprising an HTTP handler, an SNMP handler, and a Telnet handler; and"

"selecting a handler from the plurality of handlers according to the access protocol associated with the network device, wherein the selected handler is configured to:"

"extracts the interface information from the result of the transaction by applying a filter, the filter selected based on the network device and a vendor associated with the network device, the filter compatible with a proprietary data organization associated with the vendor."

On the other hand, Martenson discloses

"storing a plurality of handlers embodied in a machine-readable non-transitory medium, the plurality of handlers comprising an HTTP handler, an SNMP handler, and a Telnet handler; and" [See col. 3 lines 30-33, Network protocols include, but not limited to: Transmission Control Protocol/Internet (TCP/IP), Hypertext Transfer Protocol (HTTP), File Transfer Protocol (FTP), proprietary resource management protocols, Telnet, and Simple Network Management Protocol (SNMP). Accordingly, a plurality of handlers (network protocols) embodied in a machine-readable non-transitory medium (figure 2), the plurality of handlers (network protocols) comprising an HTTP handler (HTTP), an SNMP handler (SNMP), and a Telnet handler (Telnet)]

"selecting a handler from the plurality of handlers according to the access protocol associated with the network device, wherein the selected handler:"[Abstract, the system providing for remote client control of a resource using common network protocol languages, thereby enabling a user to manage the resource using an existing browser. col. 3 lines 30-33, Network protocols include, but not limited to: Transmission Control Protocol/Internet (TCP/IP), Hypertext Transfer Protocol (HTTP), File Transfer Protocol (FTP), proprietary resource management protocols, Telnet, and Simple Network Management Protocol (SNMP). col. 3 lines 58-61, The more popular the protocol, the more likely users will have a compatible browser for selecting management options and monitoring resource fault/status conditions. Accordingly, select a handler from the plurality of handlers (using common network protocol languages) according to the access protocol (browser) associated with the network device (client).]

"extracts the interface information from the result of the transaction by applying a filter, the filter selected based on the network device and a vendor associated with the network device,

the filter compatible with a proprietary data organization associated with the vendor."[See col. 4 lines 10-31. Accordingly, extracts the interface information (client selects an option and the client's browser automatically transmits a message based on the option selected) from the result of the transaction (view provided the client) by applying a filter (options database), the filter (options database) selected (downloading on or more options to the client from the options database) based on the network device (client) and a vendor (network resource) associated with the network device (client access the particular network resource), the filter (options database) compatible with a proprietary data organization (options are preprogrammed for that particular network resource, and each option is associated with an operation to perform at the network resource) associated with the vendor (network resource)]

Both Wynblatt and Martenson are systems of network data management systems that control different data resources. They are therefore within the same field of endeavor. Wynblatt however lacked explicitly disclosing the specific network protocols being claimed. Martenson disclosed the specific network protocols as claimed above. It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to have applied Martenson's disclosure above to the disclosure of Wynblatt for the purpose of allowing clients to use common network protocol languages and provide simplified user interfaces for network resource management.

Claim 15 :

The combination of Wynblatt and Martenson disclose in Wynblatt "wherein the access protocol associated with the network device is selected from a group consisting of: Simple Network Management Protocol; Common Management Information Protocol; Command Line Interface; Hypertext Transfer Protocol; Structured Query Language; and Simple Object Access Protocol."[0052 and 0055. Accordingly, wherein the access protocol (schema) associated with the network device (figure 1 element 20/30) is selected from a group consisting of: Simple Network Management Protocol; Common Management Information Protocol; Command Line Interface; Hypertext Transfer Protocol; Structured Query Language(0055, SQL); and Simple Object Access Protocol]

Claim 16 :

The combination of Wynblatt and Martenson disclose in Wynblatt "the relational mapper configured to translate the relational query, in the form of Structured Query Language, received through the relational interface from the software application, to native protocol messages according to an access protocol, in the form of Simple Network Management Protocol, associated with the network device."[0043, 0052, 0055, and figure 1. Accordingly, further comprising the relational mapper configured to translate the relational query (0052, traditional database system), in the form of Structured Query Language (0055, SQL), received through the relational interface from the software application (figure 1 element 25/30), to native protocol messages (0052, network message) according to an access protocol (0052, schema), in the form of Simple Network Management Protocol (0043, TCP/IP), associated with the network device

(figure 1 element 20/30)]

Claim 17 :

The combination of Wynblatt and Martenson disclose in Wynblatt "wherein the access protocol associated with the network device is selected from a group consisting of: Simple Network Management Protocol; Common Management Information Protocol; Command Line Interface; Hypertext Transfer Protocol; Structured Query Language; and Simple Object Access Protocol." [0052 and 0055. Accordingly, wherein the access protocol (schema) associated with the network device (figure 1 element 20/30) is selected from a group consisting of: Simple Network Management Protocol; Common Management Information Protocol; Command Line Interface; Hypertext Transfer Protocol; Structured Query Language(0055, SQL); and Simple Object Access Protocol]

Claim 18 :

The combination of Wynblatt and Martenson disclose in Wynblatt "relational mapper code to translate the relational query, in the form of Structured Query Language, received from the software application, to native protocol messages according to an access protocol, in the form of Simple Network Management Protocol, associated with the network device."[0043, 0052, 0055, and figure 1. Accordingly, relational mapper code to translate the relational query (0052, traditional database system), in the form of Structured Query Language (0055, SQL), received from the software application (figure 1 element 25/30), to native protocol messages (0052, network message) according to an access protocol (0052, schema), in the form of Simple

Network Management Protocol (0043, TCP/IP), associated with the network device (figure 1 element 20/30)]

Claim 19 :

The combination of Wynblatt and Martenson disclose in Wynblatt "wherein the access protocol associated with the network device is selected from a group consisting of: Simple Network Management Protocol; Common Management Information Protocol; Command Line Interface; Hypertext Transfer Protocol; Structured Query Language; and Simple Object Access Protocol."[0052 and 0055. Accordingly, wherein the access protocol (schema) associated with the network device (figure 1 element 20/30) is selected from a group consisting of: Simple Network Management Protocol; Common Management Information Protocol; Command Line Interface; Hypertext Transfer Protocol; Structured Query Language(0055, SQL); and Simple Object Access Protocol]

Claim 20 :

The combination of Wynblatt and Martenson disclose in Wynblatt "the relational mapper operable to translate the relational query, in the form of Structured Query Language, received through the relational interface from the software application, to native protocol messages according to an access protocol, in the form of Simple Network Management Protocol, associated with the network device."[0043, 0052, 0055, and figure 1. Accordingly, wherein translating the relational query (traditional database query) received from the software

application (figure 1 element 25/30), to native protocol messages (network messages) according to an access protocol (schema) associated with the network device (figure 1 element 20/30) comprises translating the relational query (converting), in the form of Structured Query Language (SQL), received from the software application (figure 1 element 30/25), to native protocol messages (network messages) according to an access protocol (schema), in the form of Simple Network Management Protocol (TCP/IP), associated with the network device (figure 1 element 20/30)]

Claim 21 :

Wynblatt discloses the following claimed limitations:

"a processor; and"[figure 1]

"a program storage device readable by the computer system, tangibly embodying a program of instructions executable by the processor to:"[figure 1]

"receive a relational query from a software application requesting network management information from a specified network device, the network management information including information allowing the software application to monitor, control, and configure devices on a network remotely via the network;"[See figure 1 elements 20, 25, 30, and 0052, system to convert traditional database queries into network messages that are appropriate for a network of data sources in which each data source is viewed as one or more database records (realtonal model) or object instances (object oriented model) or some combination thereof, and in which the schema described above is used. See 0042, examples of data consumers 25 include controllers and monitoring systems.

Accordingly, receive a relational query (traditiaonal database queries) from a software application (figure 1 element 25/30) requesting network management information (records) from a specified network device (figure 1 element 20/30), the network management information including information (data) allowing the software application (figure 1 element 25/30) to monitor (0042, monitoring system), control (0042, control system), and configure devices on a network remotely via the network (0054, list of return values which the data sources should return if the constraints are satisfied)]]

"translate the relational query requesting network management information received from the software application, to native protocol messages according to an access protocol associated with the network device; and"[0052, system to convert traditional database queries into network messages that are appropriate for a network of data sources in which each data source is viewed as one or more database records (relational model) or object instances (object oriented model) or some combination thereof, and in which the schema described above is used. Accordingly, translate (converting) the relational query requesting network management information (traditional database query) received from the software application (figure 1 element 25/30), to native protocol messages (network messages) according to an access protocol (schema) associated with the network device (figure 1 element 20/30).]

"handle the native protocol messages as a transaction with the network device, return a result of the transaction to the software application."[See 0072 Network interface response to network messages. See 0073, each data producing node 20 or 30 includes either in its network interface or in the application program resident on that node

the necessary software firmware that processes received network messages and transmits response messages back to the appropriate querying node when the query constraints are met. Accordingly, handle the native protocol messages (network messages) as a transaction (received/transmit) with the network device (figure 1 element 30/20), return a result of the transaction (transmits response back) to the software application (figure 1 element 25/30)]

Wynblatt does not explicitly disclose

"storing a plurality of handlers embodied in a machine-readable non-transitory medium, the plurality of handlers comprising an HTTP handler, an SNMP handler, and a Telnet handler; and"

"select a handler from the plurality of handlers according to the access protocol associated with the network device, wherein the selected handler is configured to:"

"extracts the interface information from the result of the transaction by applying a filter, the filter selected based on the network device and a vendor associated with the network device, the filter compatible with a proprietary data organization associated with the vendor."

On the other hand, Martenson discloses

"storing a plurality of handlers embodied in a machine-readable non-transitory medium, the plurality of handlers comprising an HTTP handler, an SNMP handler, and a Telnet handler; and" [See col. 3 lines 30-33, Network protocols include, but not limited to: Transmission Control Protocol/Internet (TCP/IP), Hypertext Transfer Protocol (HTTP), File Transfer Protocol (FTP),

proprietary resource management protocols, Telnet, and Simple Network Management Protocol (SNMP). Accordingly, a plurality of handlers (network protocols) embodied in a machine-readable non-transitory medium (figure 2), the plurality of handlers (network protocols) comprising an HTTP handler (HTTP), an SNMP handler (SNMP), and a Telnet handler (Telnet)]

"select a handler from the plurality of handlers according to the access protocol associated with the network device, wherein the selected handler:"[Abstract, the system providing for remote client control of a resource using common network protocol languages, thereby enabling a user to manage the resource using an existing browser. col. 3 lines 30-33, Network protocols include, but not limited to: Transmission Control Protocol/Internet (TCP/IP), Hypertext Transfer Protocol (HTTP), File Transfer Protocol (FTP), proprietary resource management protocols, Telnet, and Simple Network Management Protocol (SNMP). col. 3 lines 58-61, The more popular the protocol, the more likely users will have a compatible browser for selecting management options and monitoring resource fault/status conditions. Accordingly, select a handler from the plurality of handlers (using common network protocol languages) according to the access protocol (browser) associated with the network device (client).]

"extracts the interface information from the result of the transaction by applying a filter, the filter selected based on the network device and a vendor associated with the network device, the filter compatible with a proprietary data organization associated with the vendor."[See col. 4 lines 10-31. Accordingly, extracts the interface information (client selects an option and the client's browser automatically transmits a message based on the option selected) from the result of the transaction (view provided the client) by applying a filter (options database), the filter (options database) selected (downloading on or more options to the client from the options

database) based on the network device (client) and a vendor (network resource) associated with the network device (client access the particular network resource), the filter (options database) compatible with a proprietary data organization (options are preprogrammed for that particular network resource, and each option is associated with an operation to perform at the network resource) associated with the vendor (network resource)]

Both Wynblatt and Martenson are systems of network data management systems that control different data resources. They are therefore within the same field of endeavor. Wynblatt however lacked explicitly disclosing the specific network protocols being claimed. Martenson disclosed the specific network protocols as claimed above. It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to have applied Martenson's disclosure above to the disclosure of Wynblatt for the purpose of allowing clients to use common network protocol languages and provide simplified user interfaces for network resource management.

Claim 22 :

Wynblatt discloses the following claimed limitations:

"receive a relational query from a software application requesting network management information from a specified network device, the network management information including interface information allowing the software application to monitor, control, and configure devices on a network remotely via the network ;"[See figure 1 elements 20, 25, 30, and 0052,

system to convert traditional database queries into network messages that are appropriate for a network of data sources in which each data source is viewed as one or more database records (realtonal model) or object instances (object oriented model) or some combination thereof, and in which the schema described above is used. See 0042, examples of data consumers 25 include controllers and monitoring systems. Accordingly, receive a relational query (traditiaonal database queries) from a software application (figure 1 element 25/30) requesting network management information (records) from a specified network device (figure 1 element 20/30), the network management information including interface information (data) allowing the software application (figure 1 element 25/30) to monitor (0042, monitoring system), control (0042, control system), and configure devices on a network remotely via the network (0054, list of return values which the data sources should return if the constraints are satisfied)]

"translate the relational query requesting network management information received from the software application, to native protocol messages according to an access protocol associated with the network device; and" [0052, system to convert traditional database queries into network messages that are appropriate for a network of data sources in which each data source is viewed as one or more database records (relational model) or object instances (object oriented model) or some combination thereof, and in which the schema described above is used. Accordingly, translate (converting) the relational query (traditional database query) received from the software application (figure 1 element 25/30), to native protocol messages (network messages) according to an access protocol (schema) associated with the network device (figure 1 element 20/30).]

"handle the native protocol messages as a transaction with the network device, return a result of the transaction to the software application." [See 0072 Network interface response to

network messages. See 0073, each data producing node 20 or 30 includes either in its network interface or in the application program resident on that node the necessary software firmware that processes received network messages and transmits response messages back to the appropriate querying node when the query constraints are met. Accordingly, handle the native protocol messages (network messages) as a transaction (received/transmit) with the network device (figure 1 element 30/20), return a result of the transaction (transmits response back) to the software application (figure 1 element 25/30)]

Wynblatt does not explicitly disclose

"store a plurality of handlers embodied in a machine-readable non-transitory medium, the plurality of handlers comprising an HTTP handler, an SNMP handler, and a Telnet handler; and"

"select a handler from the plurality of handlers according to the access protocol associated with the network device, wherein the selected handler is configured to:"

"extract the interface information from the result of the transaction by applying a filter, the filter selected based on the network device and a vendor associated with the network device, the filter compatible with a proprietary data organization associated with the vendor."

On the other hand, Martenson discloses

"store a plurality of handlers embodied in a machine-readable non-transitory medium, the plurality of handlers comprising an HTTP handler, an SNMP handler, and a Telnet handler; and" [See col. 3 lines 30-33, Network protocols include, but not limited to: Transmission Control Protocol/Internet (TCP/IP), Hypertext Transfer Protocol (HTTP), File Transfer Protocol (FTP), proprietary resource management protocols, Telnet, and Simple Network Management Protocol

(SNMP). Accordingly, store a plurality of handlers (network protocols) embodied in a machine-readable non-transitory medium (figure 2), the plurality of handlers (network protocols) comprising an HTTP handler (HTTP), an SNMP handler (SNMP), and a Telnet handler (Telnet)]

"select a handler from the plurality of handlers according to the access protocol associated with the network device, wherein the selected handler:"[Abstract, the system providing for remote client control of a resource using common network protocol languages, thereby enabling a user to manage the resource using an existing browser. col. 3 lines 30-33, Network protocols include, but not limited to: Transmission Control Protocol/Internet (TCP/IP), Hypertext Transfer Protocol (HTTP), File Transfer Protocol (FTP), proprietary resource management protocols, Telnet, and Simple Network Management Protocol (SNMP). col. 3 lines 58-61, The more popular the protocol, the more likely users will have a compatible browser for selecting management options and monitoring resource fault/status conditions. Accordingly, select a handler from the plurality of handlers (using common network protocol languages) according to the access protocol (browser) associated with the network device (client).]

"extract the interface information from the result of the transaction by applying a filter, the filter selected based on the network device and a vendor associated with the network device, the filter compatible with a proprietary data organization associated with the vendor."[See col. 4 lines 10-31. Accordingly, extract the interface information (client selects an option and the client's browser automatically transmits a message based on the option selected) from the result of the transaction (view provided the client) by applying a filter (options database), the filter (options database) selected (downloading on or more options to the client from the options database) based on the network device (client) and a vendor (network resource) associated with

the network device (client access the particular network resource), the filter (options database) compatible with a proprietary data organization (options are preprogrammed for that particular network resource, and each option is associated with an operation to perform at the network resource) associated with the vendor (network resource)]

Both Wynblatt and Martenson are systems of network data management systems that control different data resources. They are therefore within the same field of endeavor. Wynblatt however lacked explicitly disclosing the specific network protocols being claimed. Martenson disclosed the specific network protocols as claimed above. It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to have applied Martenson's disclosure above to the disclosure of Wynblatt for the purpose of allowing clients to use common network protocol languages and provide simplified user interfaces for network resource management.

Claim 23 :

Wynblatt discloses the following claimed limitations:

"receive a relational query from a software application requesting network management information from a specified network device, the network management information including interface information allowing the software application to monitor, control, and configure devices on a network remotely via the network" [See figure 1 elements 20, 25, 30, and 0052, system to convert traditional database queries into network messages that are appropriate for a network of data sources in which each data source is viewed as one or more database records

(realtonal model) or object instances (object oriented model) or some combination thereof, and in which the schema described above is used. See 0042, examples of data consumers 25 include controllers and monitoring systems. Accordingly, receive a relational query (traditiaonal database queries) from a software application (figure 1 element 25/30) requesting network management information (records) from a specified network device (figure 1 element 20/30), the network management information including interface information (data) allowing the software application (figure 1 element 25/30) to monitor (0042, monitoring system), control (0042, control system), and configure devices on a network remotely via the network (0054, list of return values which the data sources should return if the constraints are satisfied)]

"translate the relational query requesting network management information received from the software application, to native protocol messages according to an access protocol associated with the network device; and" [0052, system to convert traditional database queries into network messages that are appropriate for a network of data sources in which each data source is viewed as one or more database records (relational model) or object instances (object oriented model) or some combination thereof, and in which the schema described above is used. Accordingly, translate (converting) the relational query requesting network management information (traditional database query) received from the software application (figure 1 element 25/30), to native protocol messages (network messages) according to an access protocol (schema) associated with the network device (figure 1 element 20/30).]

"handle the native protocol messages as a transaction with the network device, return a result of the transaction to the software application." [See 0072 Network interface response to network messages. See 0073, each data producing node 20 or 30 includes either in its network

interface or in the application program resident on that node the necessary software firmware that processes received network messages and transmits response messages back to the appropriate querying node when the query constraints are met. Accordingly, handle the native protocol messages (network messages) as a transaction (received/transmit) with the network device (figure 1 element 30/20), return a result of the transaction (transmits response back) to the software application (figure 1 element 25/30)]

Wynblatt does not explicitly disclose

"store a plurality of handlers embodied in a machine-readable non-transitory medium, the plurality of handlers comprising an HTTP handler, an SNMP handler, and a Telnet handler; and"

"select a handler from the plurality of handlers according to the access protocol associated with the network device, wherein the selected handler is configured to:"

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"select a handler from the plurality of handlers according to the access protocol associated with the network device, wherein the selected handler:"[Abstract, the system providing for remote client control of a resource using common network protocol languages, thereby enabling a user to manage the resource using an existing browser. col. 3 lines 30-33, Network protocols include, but not limited to: Transmission Control Protocol/Internet (TCP/IP), Hypertext Transfer Protocol (HTTP), File Transfer Protocol (FTP), proprietary resource management protocols, Telnet, and Simple Network Management Protocol (SNMP). col. 3 lines 58-61, The more popular the protocol, the more likely users will have a compatible browser for selecting management options and monitoring resource fault/status conditions. Accordingly, select a handler from the plurality of handlers (using common network protocol languages) according to the access protocol (browser) associated with the network device (client).]

"extract the interface information from the result of the transaction by applying a filter, the filter selected based on the network device and a vendor associated with the network device, the filter compatible with a proprietary data organization associated with the vendor."[See col. 4 lines 10-31. Accordingly, extract the interface information (client selects an option and the client's browser automatically transmits a message based on the option selected) from the result of the transaction (view provided the client) by applying a filter (options database), the filter (options database) selected (downloading on or more options to the client from the options database) based on the network device (client) and a vendor (network resource) associated with

the network device (client access the particular network resource), the filter (options database) compatible with a proprietary data organization (options are preprogrammed for that particular network resource, and each option is associated with an operation to perform at the network resource) associated with the vendor (network resource)]

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Response to Arguments

14. Applicant's arguments with respect to claims 1-11 and 15-23 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

15. The prior art made of record listed on pto-892 and not relied, if any, upon is considered pertinent to applicant's disclosure.

Contact Information

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL PHAM whose telephone number is (571)272-3924. The examiner can normally be reached on 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cottingham can be reached on 5712727079. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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